

A2CC: Writing Equations for Exponentials

Date: _____

1. If the graph of an exponential function passes through the points $(0, 5)$ and $(3, 320)$, what is the equation of this exponential function?
2. If the graph of an exponential function passes through the points $(2, 16)$ and $(6, 256)$, what is the equation of this exponential function?
3. If the graph of an exponential function passes through the points $(-2, 8)$ and $(1, 27)$, what is the equation of this exponential function?

4. If the graph of an exponential function passes through the points $\left(3, \frac{8}{9}\right)$ and $\left(4, \frac{16}{27}\right)$, what is the equation of this exponential function?

5. If the graph of an exponential function passes through the points $(1, 4)$ and $(2, 12)$, what is the equation of this exponential function?

6. If the graph of an exponential function passes through the points $\left(1, \frac{5}{2}\right)$ and $\left(3, \frac{125}{2}\right)$, what is the equation of this exponential function?

7. If the graph of an exponential function passes through the points $(1, 18)$ and $(3, 648)$, what is the equation of this exponential function?

8. If the graph of an exponential function passes through the points $\left(1, \frac{9}{4}\right)$ and $\left(4, \frac{243}{4}\right)$, what is the equation of this exponential function?

9. If the graph of an exponential function passes through the points $(1, 28)$ and $(3, 448)$, what is the equation of this exponential function?